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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/273,784      | 03/22/1999  | JOHN G. MCBRIDE      | 10971308-1          | 7570             |

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EXAMINER

PHAN, THAI Q

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2123

DATE MAILED: 06/04/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
**09/273,784**

Applicant(s)  
**John McBride**

Examiner  
**Thai Phan**

Art Unit  
**2123**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Mar. 24, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8, 9, 15, and 16 is/are rejected.
- 7) ☒ Claim(s) 3-7, 10-14, and 17-20 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

### DETAILED ACTION

This Office Action is in response to applicant's response filed on 03/24/2003. Claims 1-20 are pending in this Office Action.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 1, 2, 8, 9, 15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Srinivasan et al., patent no. 6,499,129 B1.

As per claims 1 and 15, Srinivasan anticipates method and system for estimating design performances, including handling cross-coupling effects, simultaneous switching, etc. with feature limitations identical to the claims (Summary of the Invention, col. 5, lines 18-32). According to Srinivasan, the method and system for design rule checking includes a computer configured to execute a rule checker program (col. 5, lines 18-32), wherein the design rule being checked for an integrated circuit design having gates, gate connected in datapath or along circuit paths including static gate characteristics, transistor parameters such as transistor widths, lengths, connected in device channel, etc. ("Summary of the Invention", col. 5, lines 18-32, col. 6, lines

10-41, for instance). The design rule checker program is to check transistor susceptible to noise in the cross-talk influence (col. 5, lines 18-32, for example), including checking noise susceptible or noise immunity in the deep submicron of the transistor circuit design (Summary of the Invention).

As per claim 2, Srinivasan anticipates reading transistor design parameters such as channel length, gate width, length, and the likes for design rule check as claimed. Such transistor circuit design in static gate under rule checking would include for example inverter gate, p-channel and n-channel transistor, CMOS channel parameters, design parameters, etc. as well-known in transistor circuit design, and the rule checking of the gate circuit statically verifies device characteristics susceptible to noise in a specified design operation bound within thresholds values as known in MOS and CMOS of the circuit design (col. 6, lines 10-41, for example)

As per claim 8, Srinivasan anticipates method and system for estimating design performances, including handling cross-coupling effects, simultaneous switching, etc. with feature limitations identical to the claims (Summary of the Invention, col. 5, lines 18-32). According to Srinivasan, the method and system for design rule checking includes a computer configured to execute a rule checker program (col. 5, lines 18-32), wherein the design rule being checked for an integrated circuit design having gates, gate connected in datapath or along circuit paths including static gate characteristics, transistor parameters such as transistor widths, lengths, connected in device channel, etc. ("Summary of the Invention", col. 5, lines 18-32, col. 6, lines 10-41, for instance). The design rule checker program is to check transistor susceptible to noise

in the cross-talk influence (col. 5, lines 18-32, for example), including checking noise susceptible or noise immunity in the deep submicron of the transistor circuit design (Summary of the Invention).

As per claim 9, Srinivasan anticipate reading transistor design parameters for design rule check as claimed. Such transistor circuit design in static gate under rule checking would include for example inverter gate, p-channel and n-channel transistor, CMOS channel parameters, design parameters, etc. as well-known in transistor circuit design, and the rule checking of the gate circuit statically verifies device characteristics susceptible to noise in a region of operation bound by threshold values as known in MOS device operation (Background of the Invention, col. 6, lines 10-42).

As per claim 16, Srinivasan anticipate reading transistor design parameters for design rule check as claimed. Such transistor circuit design in static gate under rule checking would include for example inverter gate, p-channel and n-channel transistor, CMOS channel parameters, design parameters, etc. as well-known in transistor circuit design, and the rule checking of the gate circuit statically verifies device characteristics susceptible to noise, namely, within specific design threshold values as known in MOS circuit operation (col. 6, lines 10-42).

***Allowable Subject Matter***

3. Claims 3-7, 10-14, and 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Dependent claims 3-7, 10-14, and 17-20 are objected to because the claims require a plurality of checking models for rule checking program and method, each rule checking model is associated with ratio of the width of the P-field transistor to the width of the N-field transistor, the ratio corresponding to the numerical value stored in the memory device. In each checking model, the rule checker program obtaining a (first) ratio of the width of the n and p-type transistor of the first model, the first ratio used to access the first and second threshold values stored in the memory device, the rule checker program determines noise levels on the inputs taking possible high or low values, and compares the determined noise levels to the first and second threshold values to determine the gate meets acceptable noise immunity requirement with respect to each model as claimed herein. The art of record does not expressly disclose such limitations as in the dependent claims.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Phan whose telephone number is (703) 305-3812.
6. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 746-7239, (for formal communications intended for entry)

**Or:**

(703) 746-7240 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive, Arlington, VA., Sixth Floor (Receptionist).

June 1, 2003

*Chapman*  
*Patent Examiner*  
*AU 2123*